

REMARKS

Claims 1-23 are pending in the application. Applicants respectfully request entry of the foregoing amendments to the specification prior to further examination. No new matter has been introduced. Acceptance is respectfully requested.

Objection to the drawings

The drawings have been objected to as failing to comply with 37 C.F.R. 1.84(p)(5) because they include reference character 10 in figure 1 not mentioned in the description. The specification at page 16, line 20 has been amended to add reference character 10 in the description in compliance with 37 C.F.R. 1.121(b). No new matter is introduced.

Objection to the specification

The corrections requested in paragraphs 3 and 4 of pages 2 and 3 of the Office Action are being made in the specification as set forth above. Applicants thank the Examiner for pointing out these errors. No new matter is introduced by way of these amendments.

Requirement for information

The Examiner has required that the Applicant and the Assignee of this application provide certain information that the Examiner has determined is reasonably necessary to the examination of this application under 37 C.F.R. 1.105. Specifically, the Examiner has requested the title, citation and copy of each publication that is a source used for the description of the prior art in the disclosure and a concise explanation of that publication's contribution to the description of the prior art. In response to this requirement, Applicants and the Assignee state that this information is unknown and/or is not readily available to the Applicants or the Assignee.

The Examiner has also requested a concise explanation of each publication previously disclosed in the information disclosure statement and their respective contributions to the description of the prior art. In response to this requirement, Applicants and the Assignee state that none of the publications previously disclosed in the Information Disclosure Statements contributed to the description of the prior art.

The references of the 1/13/03 IDS are summarized as follows:

AA describes a system for categorizing linked collections of documents. In particular, the system analyzes the topology, content, and usage of linked collections of documents such as those found on the web to facilitate information searching. The categorization is based on feature vectors characterizing individual page information. The system also provides for the prediction of the need of other web pages in a particular context.

AB describes a system for generating and displaying point of view and generic gists to be used in a document browsing system. A point of view gist provides a synopsis of the content of a document from a predetermined point of view. The system generates point of view gists based on different themes or topics contained in a document.

AC describes a method for searching a database of records and organizing the results of the search into a set of most relevant categories so that a user may obtain only those records that are most relevant. A search apparatus processes the search result list to dynamically create a set of search result categories. Each category is associated with a subset of records within the search result list having one or more common characteristics.

AD describes a document classification system that classifies words into word clusters. Word clusters are arranged from categories of documents. The document classification system uses a distribution of word clusters in a category and a distribution of words in the word cluster to indicate whether a document is in a particular category.

AE describes a computerized method for ranking a set of documents according to their content and their connectivity by using topic distillation. According to the method, a graph is constructed in the memory of a computer system. The graph's nodes (representing documents) and directed edges (representing the links) are analyzed to generate a ranking of a set of documents.

AF describes a system that dynamically generates contextual hypertext links in a source document to other topically relevant documents in response to the content of the source document or user selected portions of the source document. The system selects terms relevant to the user selected portion by linguistic analysis which selects the most frequently occurring terms. From these selected terms, target documents relevant to the selected terms are identified and contextual links are then created between the selected terms and target documents.

AG describes systems and methods for testing, classification and remediation. The systems and methods provide (1) representations of cognitive domain in the case of humans and a functionality domain in the case of systems using partially ordered sets; (2) the testing and classification of humans into cognitive domain states and systems into functionality domain states; (3) a remediation program keyed to a domain state designed to bring a human or a system to a domain state.

AH describes a system for performing speech recognition using an array of mixtures of Bayesian networks. The mixture of Bayesian networks consists of plural hypothesis-specific Bayesian networks having possibly hidden or observed variables. For each hypothesis-specific Bayesian network a structure score is computed showing the goodness of the hypothesis-specific Bayesian network in predicting observed data. The system conducts a structure search for a change in the causal links which improves the structure search score.

AI describes an information retrieval system for finding information in a distributed information system, for example, using query learning and metasearch for adding documents to resource directories contained in the distributed information system. The system uses learning methods that are independent of the search engine used to answer a query.

AR and AS are of general interest in the art.

AT describes a method for learning dynamic users interests in an automated information filtering and gathering system running on the Internet. The method uses a three descriptor approach to represent the user's interest categories.

AU describes a robust statistical model and relaxation labeling techniques for improving classification by exploiting link information in a small neighborhood around documents.

AV describes a system for navigating a topical information space. The system combines the query based and taxonomic systems and employs machine learning techniques to create dynamic document categorizations based on the full text of articles that are retrieved in response to user's queries. The system also uses Bayesian classification techniques to classify new documents within an existing categorization scheme.

AW describes a tree augmented naive Bayes classifier which maintains the computational simplicity and robustness which are characteristic of naive Bayes.

AX describes a software agent that learns the types of information available on the internet the user is interested in. Four different learning algorithms are compared.

AY describes a text classification system based on automatic feature extraction and probabilistic reasoning using Bayesian inference networks.

AZ is a PCT International Search Report making reference to some of the references listed above.

The references (AA2, AN, AO, AY2) of the 3/17/03 IDS are from the International Search Report in a counterpart foreign application. The International Search Report submitted with that IDS provides the "concise explanation" and relevance of each reference.

The references of the remaining IDSs dated 2/19/03, 3/28/03, 4/29/03, 3/25/04, 4/7/04, 6/8/04, 8/27/04 and 1/11/05 provide examples of the state of the art. These publications did not contribute to the description of the prior art because they resulted from third party examinations of applications having related subject matter to the present application and mentioned throughout the specification.

The Examiner has further requested the title, citation and copy of each publication that any of the Applicants relied upon to develop the disclosed subject matter that describes the Applicants' invention and a concise explanation of the reliance placed on that publication in the development of the disclosed subject matter. In response to this requirement, Applicants and the Assignee state that this information is unknown and/or is not readily available to the Applicants or the Assignee.

Lastly, the Examiner has requested the title, citation and copy of each publication that any of the Applicants relied upon to draft the claimed subject matter and a concise explanation of the reliance placed on that publication in distinguishing the claimed subject matter from the prior art. In response to this requirement, Applicants and the Assignee state that this information is unknown and/or is not readily available to the Applicants or the Assignee.

35 U.S.C. §102 Rejections

Claims 1 and 6 have been rejected under 35 U.S.C. 102(e) as being anticipated by Henrick et al. (U.S. Pat. No. 6,377,936) ("Henrick").

The present invention provides a data mining system for mining information on people and organizations and generating business e-mail addresses from that information. According to one aspect of the present invention, multiple crawlers or software robots traverse web sites in search of web pages that contain information of interest (Specification, page 9, beginning at line 23). A distributor controls crawler processing and an extractor extracts information about people and organizations from the pages retrieved by the crawlers. These retrieved pages are stored in a database. An integrator coupled to the database resolves duplicate information by combining related information in the database. Finally, a post-processor connected to the database analyzes the contents of the database and generates any missing information. Such missing information includes e-mail addresses (Specification, page 10, lines 11-14).

The digital processor generates an e-mail address by first obtaining a working e-mail address of an organization and deducing from that e-mail address the format of e-mail addresses to the organization. The deduced information is then used to construct potential e-mail addresses for a subject person missing e-mail address information. Finally, the digital processor verifies each constructed e-mail address by testing the e-mail address to verify whether the constructed potential e-mail address is actually the business e-mail address of the subject person.

In contrast, Henrick discloses a method for conducting targeted marketing of Internet users while maintaining the privacy of those users. Data mining is employed to determine the sites that customers visit. For example, customers with children are identified by visits to the Disney website (Abstract). The Internet Service Provider (ISP) of the customers constructs a customer mailing list based on the customer knowledge of the ISP. An interested business may then prepare an offer, such as a coupon, on a website. The ISP then alerts the customer of the offer by sending an e-mail to that customer. The e-mail message includes a hypertext link with an embedded URL to the website of the particular business and once the customer selects the embedded URL the ISP discloses the identity of the customer to the business. In this way, the ISP provides customer information to the advertiser without making it available to the public.

Henrick provides the mailing of an e-mail message by the ISP to customers in a customer mailing list generated from the data mining described in Henrick. The ISP generates the customer mailing list by associating a particular customer with a particular website. The ISP knows the e-mail addresses of its subscribers or customers. Thus, Henrick does not generate an

e-mail address for a person named in a database for whom e-mail address information is unknown (i.e., missing) as is provided in independent claims 1 and 6 supported at least by the specification at page 24, lines 27-28 and page 25, lines 20-27. Since Henrick does not teach, suggest, or otherwise make obvious each and every limitation of independent claims 1 and 6 as now amended (“the database including for each person at least the name of the person and a name of a respective employer . . . generating an e-mail address of a subject person named in the database but for whom e-mail address information is missing from the database”), Applicants respectfully request that the rejections of claims 1 and 6 be withdrawn.

Claims 11 and 17 have been rejected under 35 U.S.C. 102(e) as being anticipated by Knight et al. (U.S. Patent No. 6,493,703) (“Knight”).

Knight discloses an electronic message board system that may include a message management system, a tracking system, and/or a content building system (col. 7, lines 18-20). The message management system includes a content sorting routine and a query handling routine (col. 5, lines 49 to col. 6, line 24). The content sorting routine sorts and stores electronic messages such that they are searchable by category. The query handling routine locates a selected set of electronic messages in response to a user query. The query handling routine may be implemented with a set of search robots.

The tracking system monitors message content traffic from the subscribers and other sources (col. 6, lines 25-39). This information can then be used to modify the user interface, to determine new areas for content extraction, to add or modify classifications, etc. such that subscriber interests are taken into consideration.

The content building system builds a database of information by locating, extracting and sorting information from remote servers based on criteria specified by the message board system operator (col. 6, lines 40-59). Thus, information items related to one or more categories of the classification scheme can be located by subscribers. In sum, the message board system of Knight incorporates subscriber feedback.

The database management routine disclosed by Knight receives and stores data in a record form such that records are easily accessible. The database provided by Knight, however, is not coupled to either an integrator or a post processor as claimed in claims 11 and 17 of the instant invention. The integrator of Applicant’s invention solves duplicate information by

combining data (the duplicated and duplicating data) in the database. The post processor of Applicants' invention analyzes the contents of the database and generates missing information, such as a business e-mail addresses, based on the analysis. The on line message board system and associated subsystems of Knight do not analyze the contents of the database to generate missing information in the database. Knight does not teach, suggest, or otherwise make obvious "an integrator coupled to the database for resolving duplicate information . . . and a post processor coupled to the database for analyzing contents of the database and generating missing information therefrom" as claimed in claims 11 and 17. Therefore, Applicants respectfully request that the rejections of claims 11 and 17 be withdrawn.

35 U.S.C. § 103 Rejections

Dependent claims 4 and 9 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Henrick in view of Mills (Australian Patent Abstract No. AU-A-53031/98).

As explained above, Henrick does not teach, suggest or otherwise make obvious each and every limitation of independent claims 1 and 6. Mills does not add to Henrick the generation of missing e-mail addresses. Since claims 4 and 9 depend from independent claims 1 and 6, respectively, Applicants respectfully request that the rejection under 35 U.S.C. 103(a) be withdrawn for at least the same reasons.

Claims 5 and 10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Henrick and Mills as applied to claim 4 and in view of Barroux (U.S. Patent No. 5,923,850).

As explained above, Henrick does not teach, suggest or otherwise make obvious each and every limitation of independent claims 1 and 6. Barroux does not add to Mills and Henrick the generation of missing e-mail addresses. Since claims 5 and 10 depend from independent claims 1 and 6, respectively, Applicants respectfully request that the rejection under 35 U.S.C. 103(a) be withdrawn for at least the same reasons.

Claims 2-3 and 7-8 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Henrick and Biliris et al. (U.S. Pub. No. 2001/0009017).

As explained above, Henrick does not teach, suggest or otherwise make obvious each and every limitation of independent claims 1 and 6. Biliris does not add to Henrick the generation of missing e-mail address information. Since claims 2-3 and 7-8 depend from independent claims 1

and 6, respectively, Applicants respectfully request that the rejection under 35 U.S.C. 103(a) be withdrawn for at least the same reasons.

Claims 12-13 and 18-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Knight and Feridun et al. (U.S. Patent No. 6,336,139).

As explained above, Knight does not teach, suggest, or otherwise make obvious each and every limitation of independent claims 11 and 17. Feridun does not add to Knight the integrator of the present claimed invention or the post-processor for generating missing information. Since claims 12-13 and 18-20 depend from independent claims 11 and 17, respectively, Applicants respectfully request that the rejection under 35 U.S.C. 103(a) be withdrawn for at least the same reasons.

Claims 14 and 21 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Knight and Henrick.

As explained above, Knight and Henrick alone or in any combination do not teach, suggest or otherwise make obvious each and every limitation of independent claims 11 and 17. Since claims 14 and 21 depend from independent claims 11 and 17, respectively, Applicants respectfully request that the rejection under 35 U.S.C. 103(a) be withdrawn for at least the same reasons.

Claims 15-16 and 22-23 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Knight, Henrick and Biliris.

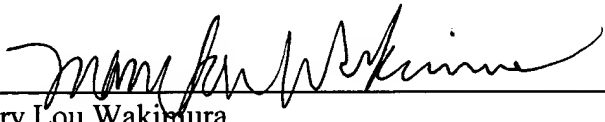
As explained above, neither Knight, Henrick, nor Biliris alone or in any combination teach, suggest or otherwise make obvious each and every limitation of independent claims 11 and 17. Since claims 15-16 and 22-23 depend from independent claims 11 and 17, respectively, Applicants respectfully request that the rejection under 35 U.S.C. 103(a) be withdrawn for at least the same reasons.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims (claims 1-23) are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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